SMARTCHAIN

Smart solutions for advancing supply systems in blue bioeconomy value chains

About the Project

SMARTCHAIN will develop approaches and tools for sustainable utilisation, production planning, logistics optimisation, and traceability to facilitate transfer of bio-resources from catch/production throughout the value chain of fisheries and aquaculture products. Automated sorting and quality characterisation along with optimising production planning will reduce waste from processing while the blockchain technology will increase the transparency in the supply chain. Project will also look into upscaling the production of high value marine ingredients from costreams from pelagic industry. Sustainability indicators and circularity criteria will be applied to assess the performance of the system solutions.

SMARTCHAIN has defined three case studies from aquaculture and fisheries value chains including Norway, Iceland, Denmark and Romania. Industry actors representing their sectors will be involved in implementation and application of the development of technologies and models through the case studies achieving a TRL between from 4 to 6. In addition, an advisory group will contribute with insights into the existing bottlenecks and technology gaps in the bioeconomy sector. SMARTCHAIN simulation framework will enable assessment of the end-to-end effects and potentials of the project and enlighten policy makers, businesses, investors, entrepreneurs, institutions, stakeholders, and citizens about potential trade-offs. Furthermore, SMARTCHAIN will generate European added-value and knowledge transfer through validated comparison of developed concepts across partner countries and facilitate collaboration across the different sectors. Focus of the project is also on development of replicable technologies and tools that can be applied to other food supply chains. Lastly, SMARTCHAIN will contribute to capacity building by creating awareness, opening opportunities for academic researchers and reach out to a broad spectrum of various stakeholders across countries.



Project Overview

1st Additional Call | 2021

Project Partners:

- Rita Vasconcellos L. d'Oliveira Bouman
 - SINTEF Ocea, Seafood Technology.
- **Dr. Zouhir El Marsni** Seagarden AS, R&D.
- Dr. Gudrun Olafsdottir
 University of Iceland,
 Faculty of Industrial Eng., Mechanical Eng. & Computer Science.
- Prof. Allan Larsen
 Technical University of Denmark, DTU Management.
- **Dr. Sigurdur Bogason** MarkMar ehf, Research.
- **Mr. Torfi Porsteinsson**Brim, Community Relations.

Keywords:

Production planning, Automated processing, End-to-end logistics, Transparency, Circularity

Priority Area:

Advancing the supply systems in the blue bioeconomy value chains